

REMARKS

This Response is submitted in reply to the final Office Action mailed on June 3, 2009. A request for continued examination ("RCE") is submitted with this Response. The Director is authorized to charge \$405.00 for the RCE and any additional fees that may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112843-91 on the account statement.

Claims 1, 3 and 5-15 are pending in this application. Claims 2 and 4 were previously canceled. In the Office Action, Claims 8 and 10 are rejected under 35 U.S.C. § 112; and Claims 1, 3 and 5-15 are rejected under 35 U.S.C. § 103. In response, Claims 1, 3 and 5-15 have been amended, and Claims 16-17 have been added. The amendments do not add new matter. In view of the amendments and/or for the reasons set forth below, Applicants respectfully submit that the rejections should be withdrawn and the application now passed to allowance.

Claims 1, 3 and 5-15 have been amended to conform the claims to U.S. patent practice.

In the Office Action, Claims 8 and 10 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. In response, Applicants have amended Claims 8 and 10 to address the informalities cited by the Patent Office. Based on at least these noted reasons, Applicants believe that Claims 8 and 10 fully comply with 35 U.S.C. §112, second paragraph.

Accordingly, Applicants respectfully request that the rejections of Claims 8 and 10 under 35 U.S.C. §112 be withdrawn.

In the Office Action, Claims 1, 3, 5-8 and 10-15 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,890,571 to Shi et al. ("*Shi*"). Applicants respectfully disagree with and traverse these rejections for at least the reasons set forth below.

Applicants have amended independent Claims 1 and 8 to recite, in part, a starch product made from at least one starch having an amylose content of > 20 %. The amendment is supported in the specification, for example, at paragraph 18 of U.S. Patent Publication No. 2007/0134392. In contrast, *Shi* fails to disclose each and every element of independent Claims 1 and 8.

In an embodiment, the claimed slowly digestible starch product has a swellable starch network, wherein the linking points of the network are formed by crystallites. The starch product has an initial hydrolysis rate (Ho) of < 300%/h and has a constant or nearly constant

hydrolysis rate (Hc) of $< 300\%/h$ for at least 0.50 h. The starch initially used for the manufacture of the starch product has an amylose content of $> 20\%$. The slowly digestible starch product is obtainable by at least partially gelatinizing or at least partially plasticizing the starch, and conditioning the starch prepared in this way, during which a starch network is formed/established. By controlling the network formation, the hydrolysis rate of the obtained starch product can be adjusted.

Shi fails to disclose or suggest a starch product made from at least one starch having an amylose content of $> 20\%$ as required by independent Claims 1 and 8. Instead, *Shi* teaches a starch product that is prepared by enzymatically debranching low amylose starches and allowing the resultant linear short chains (i.e., short chain amylose) to crystallize to a highly crystalline form. See *Shi*, column 2, lines 20-25. According to *Shi*, the term "low amylose" refers to a starch containing no more than about 10 % by weight of amylose. See *Shi*, column 2, lines 43-47. Because *Shi* teaches a low amylose starch as a starting material, *Shi's* final starch product is physically distinguishable from the starch product of the present claims. The skilled artisan would have no reasonable expectation of success that *Shi's* starch product would have the characteristics of an initial hydrolysis rate (Ho) $< 300\%/h$ and a constant or nearly constant hydrolysis rate (Hc) $< 300\%/h$ for at least 0.50 h in accordance with the present claims. As a result, *Shi* not only fails to disclose a starch having an amylose content of $> 20\%$ in accordance with the present claims, *Shi* teaches away from the present claims.

In addition, *Shi's* starch product is in the form of highly crystalline short chain amyloses. See *Shi* column 4, lines 46-47. In other words, no network or gel seems to be formed. Moreover, *Shi* teaches that the (re)crystallized starch may be recovered by filtration. See *Shi*, column 4, lines 34-37 and column 8, line 29. As a result, no network could have been formed because a filtration would not have been possible.

To form a swellable starch network in accordance with the present claims, it is necessary that crystallites are linked with each other. For the linkage, longer molecules (e.g., amylose molecules) are needed. However, the longer molecules are usually not obtained when debranching a low amylose starch as taught by *Shi*. *Shi* teaches a degree of debranching of at least 90 %, and when using completely debranched low amylose starch, only short chain amylose is present.

In sum, *Shi* fails to disclose or suggest each and every element of independent Claims 1 and 8. Moreover, *Shi* fails to even recognize the advantages, unexpected benefits and/or properties of a starch product made from at least one starch having an amylose content of > 20 % in accordance with the present claims. For at least the reasons discussed above, Applicants respectfully submit that independent Claims 1 and 8, along with the claims that depend from Claims 1 and 8, are novel, nonobvious and distinguishable from the cited reference.

Accordingly, Applicants respectfully request that the rejection of Claims 1, 3 and 5-15 under 35 U.S.C. §103 be withdrawn.

Claim 9 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Shi* in view of U.S. Patent No. 5,849,090 to Mitchell ("*Mitchell*"). Applicants respectfully submit that the patentability of Claim 1 as previously discussed renders moot the obviousness rejection of Claim 9 that depends from Claim 1. In this regard, the cited art fails to teach or suggest the elements of Claim 9 in combination with the novel elements of Claim 1.

Applicants further note that Claims 16-17 have been newly added. The new claims are fully supported by the elements that were deleted in Claims 8 and 10, respectively. Applicants respectfully submit that Claims 16-17 should be allowed.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same. In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Respectfully submitted,

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